

09/812,057

- 13 -

REMARKS

Claims 1-54 are pending in the application. Claims 1, 10, 11, 17, 20-22, 31, 32, 36, 38, 42-50, and 52-54 were rejected. Claims 2-9, 12-16, 18, 19, 23-30, 33-35, 37, 39-41, and 51 were objected to. Independent claims 1, 22, 43-46, 48, and 49 are being amended. No new matter is being introduced.

Claim 1 is being amended to positively recite a distinguishing feature over the cited references. Specifically, claim 1 as now amended recites, "instantiating a validation detector related to a protocol of the classified subject signal". During an Examiner's Interview conducted February 27, 2004, Applicant's attorney referred to Figs. 3, 6, 7, and 12. In particular, as discussed with Examiner, Fig. 12 illustrates logical flow in which detectors are instantiated as a function of the classified subject signal. For example, as illustrated in Fig. 12, if a processor determines a subject signal includes energy in subband 0 (S_0) and subband 1 (S_1), the processor instantiates a Dual-Tone, Multi-Frequency (DTMF) detector and Multi-Frequency, One Row (MF-R1) detector (step 1225). If the processor determines energy in S_0 only, the processor instantiates an MF-R1 detector with 700, 900 Hz (step 1235). If the processor determines energy in S_1 only, the processor conducts further processing to classify the signal further and instantiate a respective detector (step 1255 (ANS detector), step 1260 (AA, V.21 detectors), and step 1265 (MF-R1 in S_0 detector)). Thus, by applying *a priori* information, the processor instantiates detector(s) associated with the classified subject signal (see the specification as originally filed at least at page 22, lines 12-16 and 22-27; and page 23, lines 3-7 and 17-18).

In contrast, Murata *et al.* (USPN 5,428,680) discloses processors that continuously execute validation detectors whether or not the subject signal includes related spectral components (e.g., DTMF tones). For example, Murata *et al.* in Fig. 1 discloses a processor constantly executing a DTMF receiver (i.e., validation detector). If also detecting MF-R1 signals, Murata *et al.* would constantly execute both DTMF and MF-R1 detectors. Constant execution of detectors uses operational bandwidth of processors, as described on page 3, lines 1-6 in the Applicant's application as originally filed. It is advantageous to minimize the amount of processing used to distinguish communication protocols (Applicant's specification, page 3, lines 16-17). Thus, Murata *et al.* does not disclose and, indeed, teaches away from Applicant's claim 1.

09/812,057

- 14 -

as now amended ("instantiating a validation detector related to a protocol of the classified subject signal").

Accordingly, because the Murata *et al.* reference does not disclose every limitation of amended claim 1 ("instantiating a validation detector related to a protocol of the classified subject signal"), Applicant respectfully submits the rejection of claim 1 under 35 U.S.C. 102(b) should be withdrawn.

Because independent claims 22, 43-46, and 48-50 include similar claim limitations ("instantiating a validation detector related to a protocol of the classified subject signal") as amended claim 1, these claims should also be allowed under 35 U.S.C. 102(b) over Murata *et al.*

Claims 17, 20, 21, 36, 38, 42, and 47 were rejected under 35 U.S.C. 103(a) as being unpatentable over Cox *et al.* (USPN 5,353,346) in view of well known prior art. Similar to Murata *et al.*, Cox *et al.* also discloses a processor constantly executing a validation detector (*i.e.*, Fig. 1, block classifier and timing classifier). Thus, the Cox *et al.* reference does not teach, suggest, or provide motivation for "instantiating a validation detector related to a protocol of the classified subject signal". Because claims 17, 20, 21, 36, 38, 42, and 47 depend from independent claims that neither the cited references nor well known prior art teach, suggest, or provide motivation for, these dependent claims should be allowed for at least the same reasons as the independent claims as set forth above. Accordingly, Applicant respectfully submits that the rejections under 35 U.S.C. 103(a) as being unpatentable over Cox *et al.* in view of well known prior art should be withdrawn.

09/812,057

- 15 -

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims (claims 1-54) are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By Mark B. Solomon
Mark B. Solomon
Registration No. 44,348
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated: 2/27/04